

## ABSTRACT OF THE DISCLOSURE

Apparatus, methods and systems for frequency offset compensation in multipoint-to-point orthogonal frequency division multiplexing (OFDM) systems are provided. In the hub, frequency offset estimates are made in the frequency domain for each group of carriers of the OFDM system. The hub then transmits indications (parameters) of the frequency offset for each group of carriers to the nodes. Frequency offset compensation is then accomplished in each node, preferably in the time domain.